CASCADING STYLE SHEETS

FLUTUAÇÃO E POSICIONAMENTO

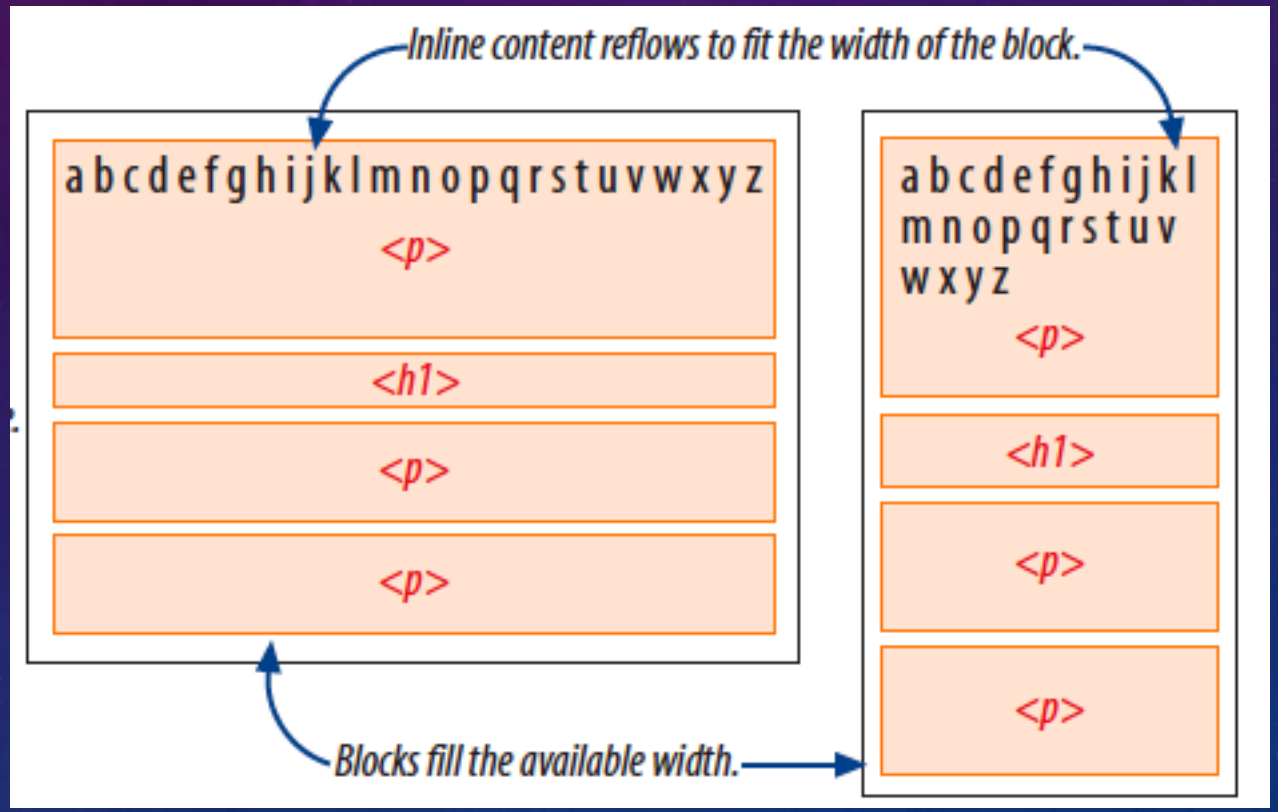
OBJETIVOS DE APRENDIZAGEM

- Compreender os mecanismos de posicionamento e fluturação de elementos dos navegadores
- Aplicar regras para personalizar e criar estilos próprios

AGENDA

- Fluxo Normal

FLUXO NORMAL



“A propriedade **`float`** move um elemento para esquerda ou direita, o máximo possível, permitindo que o próximo conteúdo envolva-se no seu entorno.”

Floating

The style sheet

```
img {
  float: right;
}
p {
  padding: 15px;
  background-color: #FFF799;
  border: 2px solid #6C4788;
}
```

Inline image in the normal flow

space next to the image is held clear

They went down, down, down, till at last they came to a passage with a door at one end, which was only fastened with a latch. The eldest Princess opened it, and they found themselves immediately in a lovely little wood, where the leaves were spangled with drops of silver which shone in the brilliant light of the moon. They next crossed another wood where the leaves were sprinkled with gold, and after that another still, where the leaves glittered with diamonds.

Inline image floated to the right.

They went down, down, down, till at last they came to a passage with a door at one end, which was only fastened with a latch. The eldest Princess opened it, and they found themselves immediately in a lovely little wood, where the leaves were spangled with drops of silver which shone in the brilliant light of the moon. They next crossed another wood where the leaves were sprinkled with gold, and after that another still, where the leaves glittered with diamonds.

image moves over and text wraps around it

```
img {
  float: right;
  margin: 10px;
}
```

Indicates outer margin edge
(this rule would not appear in the actual web page)

They went down, down, down, till at last they came to a passage with a door at one end, which was only fastened with a latch. The eldest Princess opened it, and they found themselves immediately in a lovely little wood, where the leaves were spangled with drops of silver which shone in the brilliant light of the moon. They next crossed another wood where the leaves were sprinkled with gold, and after that another still, where the leaves glittered with diamonds.

FLOATING

- Utiliza-se para criação de:
  - *layouts* de página com múltiplas colunas
  - Barras de navegação a partir de listas
  - Alinhamento similar às tabelas, porém sem tabelas (*tableless*)
- Uma das principais ferramentas vindas da modernização do CSS;

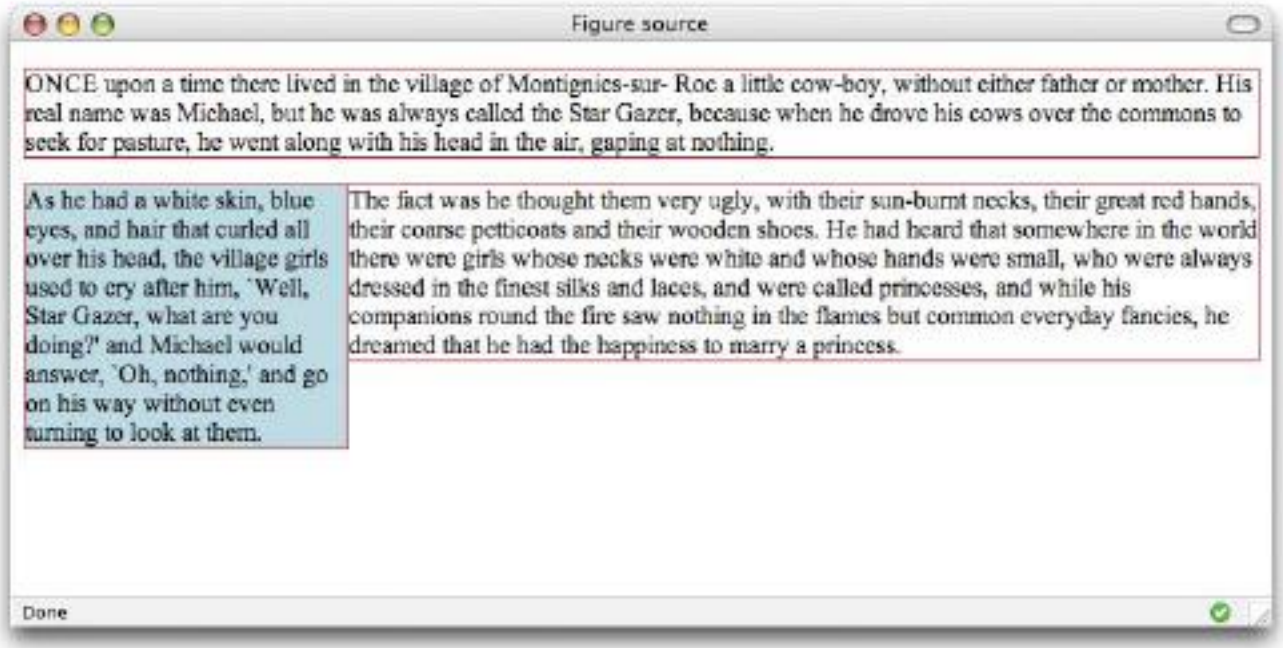
float	
Values:	left | right | none | inherit
Default:	none
Applies to:	*all elements*
Inherits:	*no*

The markup

```
<p>ONCE upon a time....</p>
<p id="float">As he had a white skin, blue eyes,...</p>
<p>The fact was he thought them very ugly...</p>
```

The style sheet

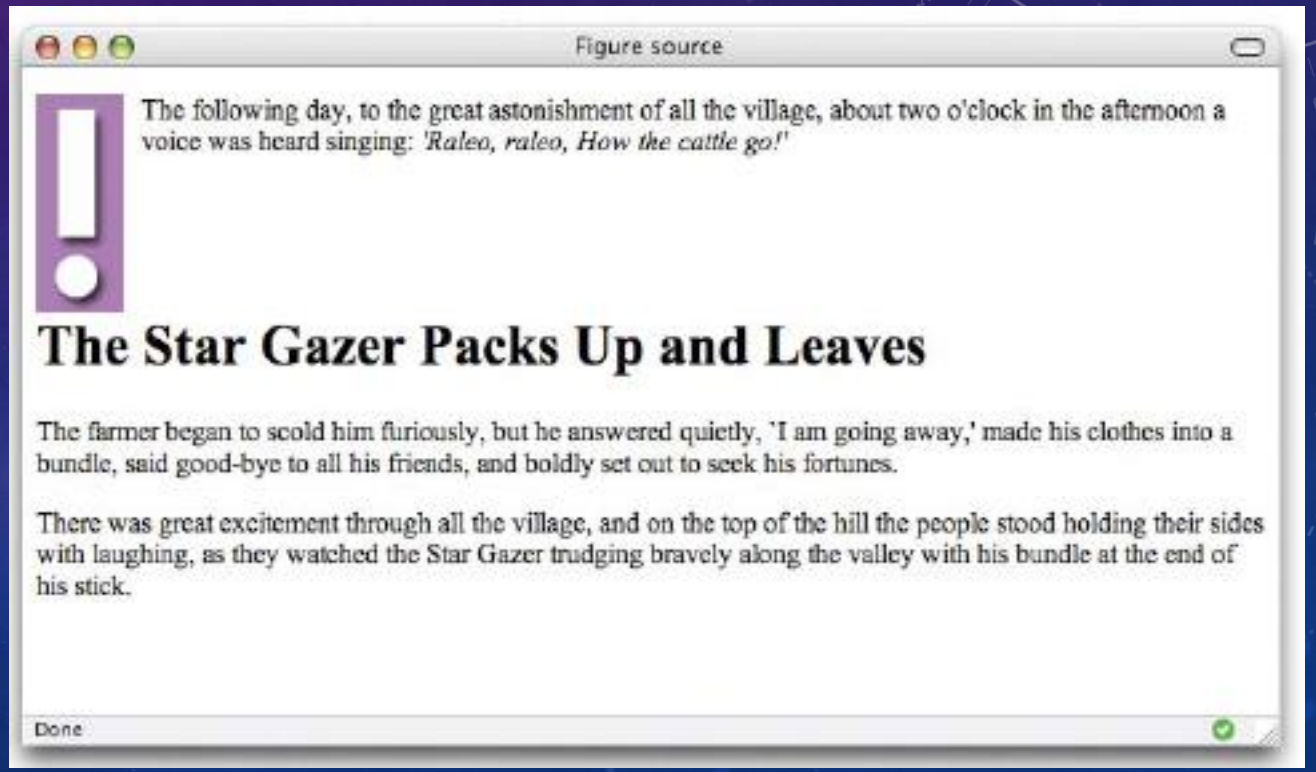
```
p#float {
  float: left;
  width: 200px;
  margin-top: 0px;
  background: #A5D3DE;
}
p {
  border: 1px solid red;
}
```



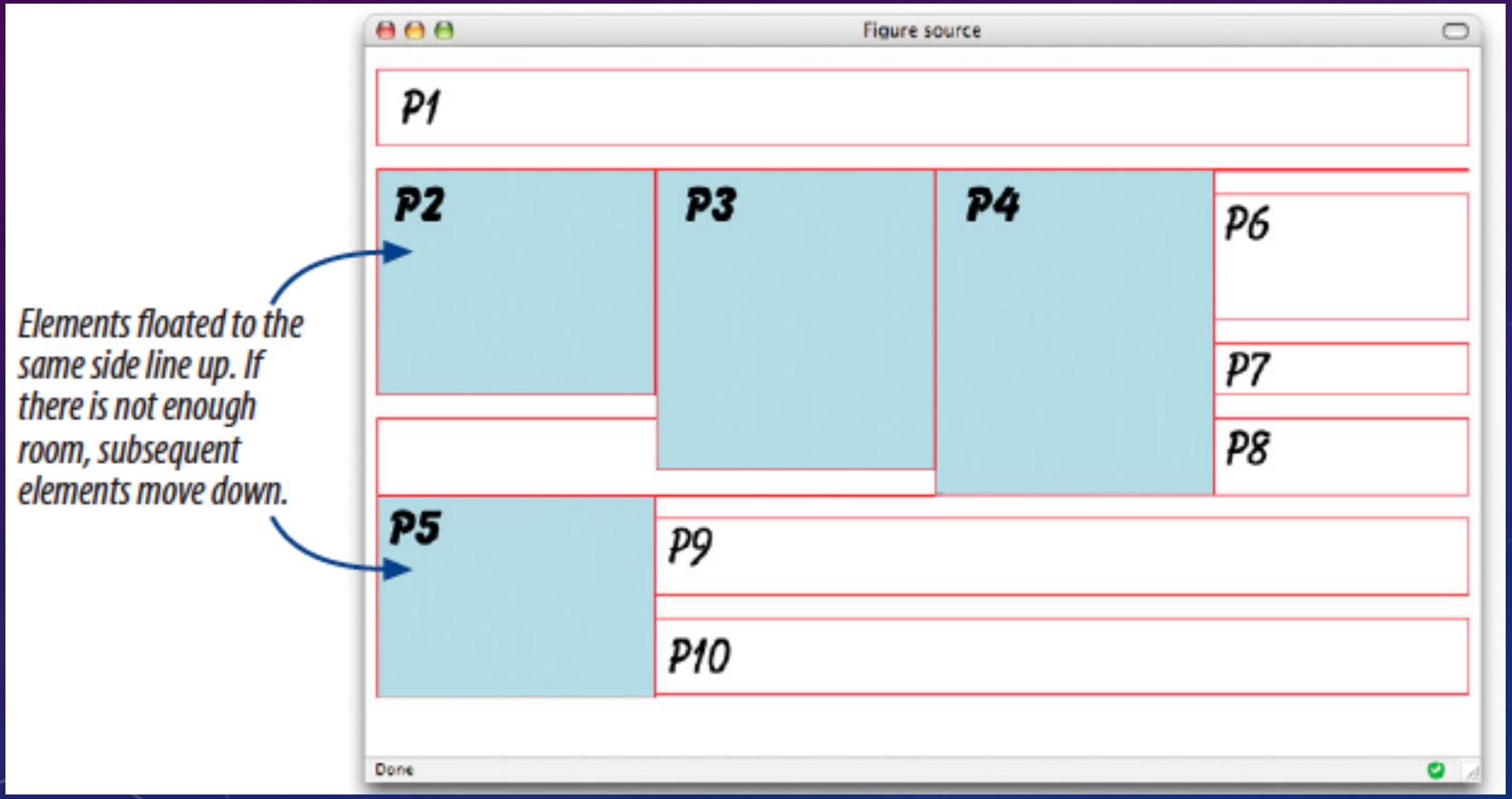
OBSERVAÇÕES

- Sempre utilizar a propriedade **`width`** para elementos flutuantes
- Elementos flutuantes sempre estarão abaixo do elemento anterior
- O conteúdo posterior a um elemento flutuante estará ao redor do mesmo
- A propriedade **`clear`** "desliga" o comportamento de ficar em torno do elemento flutuante

```
img {
  float: left;
  margin-right: 10px;
}
h2 {
  clear: left;
  margin-top: 2em;
}
```



MÚLTIPLOS ELEMENTOS




```
<p>P1</p>
<p class="float">P2</p>
<p class="float">P3</p>
<p class="float">P4</p>
<p class="float">P5</p>
<p>P6</p>
<p>P7</p>
<p>P8</p>
<p>P9</p>
<p>P10</p>
```

```
p.float {
  float: left;
  width: 200px;
  margin: 0px;
  background: #CCC;
}
p
  {border: 1px solid red;
}
```

Vertical

```css
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  width: 200px;
  background-color: #f1f1f1;
}

li a {
  display: block;
  color: #000;
  padding: 8px 16px;
  text-decoration: none;
}

/* Change the link color on hover */
li a:hover {
  background-color: #555;
  color: white;
}
```

Horizontal

```css
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  overflow: hidden;
  background-color: #333;
}

li {
  float: left;
}

li a {
  display: block;
  color: white;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
}

/* Change the link color to #111 (black) on hover */
li a:hover {
  background-color: #111;
}
```

POSICIONAMENTO

- CSS disponibiliza 4 métodos de posicionamento através da propriedade **`position`**
- Um elemento pode estar no fluxo normal ou ser removido
- Também pode ser colocado numa posição específica
- Posicionado relativo a janela do navegador

position	
Values:	static | relative | absolute | fixed | inherit
Default:	static
Applies to:	*all elements*
Inherits:	*no*

static

- Posicionamento padrão dos elementos
- Os elementos são posicionados de acordo com o fluxo normal do documento

relative

- Movimenta a caixa (box) em uma posição relativa a posição original no fluxo
- A posição original fica vazia

absolute

- Elementos são removidos do fluxo normal e colocados em uma posição da janela ou elemento contido
- A posição original fica preenchida
- O mais versátil

fixed

- Elemento permance em uma posição determinada, mesmo quando a página é rolada
- A posição original fica vazia

ESPECIFICAÇÃO

- O posicionamento é determinado através de 4 dimensões
- Cada dimensão determina a distância que o elemento deve estar afastado da borda

`top, right, bottom, left`

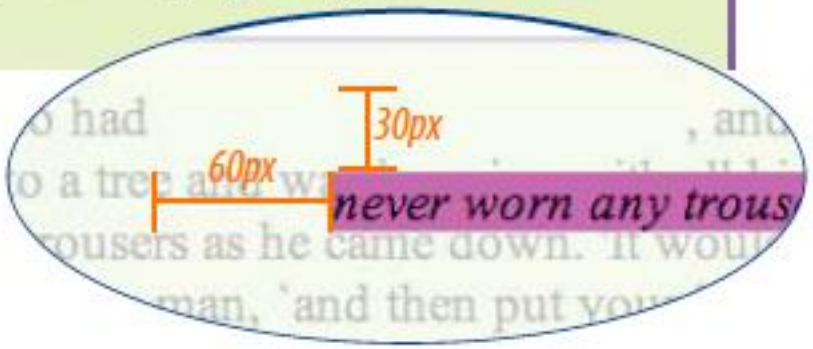
Values:	*length measurement* | *percentage* | `auto` | `inherit`
Default:	`auto`
Applies to:	*positioned elements (where position value is* `relative`, `absolute`, *or* `fixed`*)*
Inherits:	*no*

POSICIONAMENTO RELATIVO

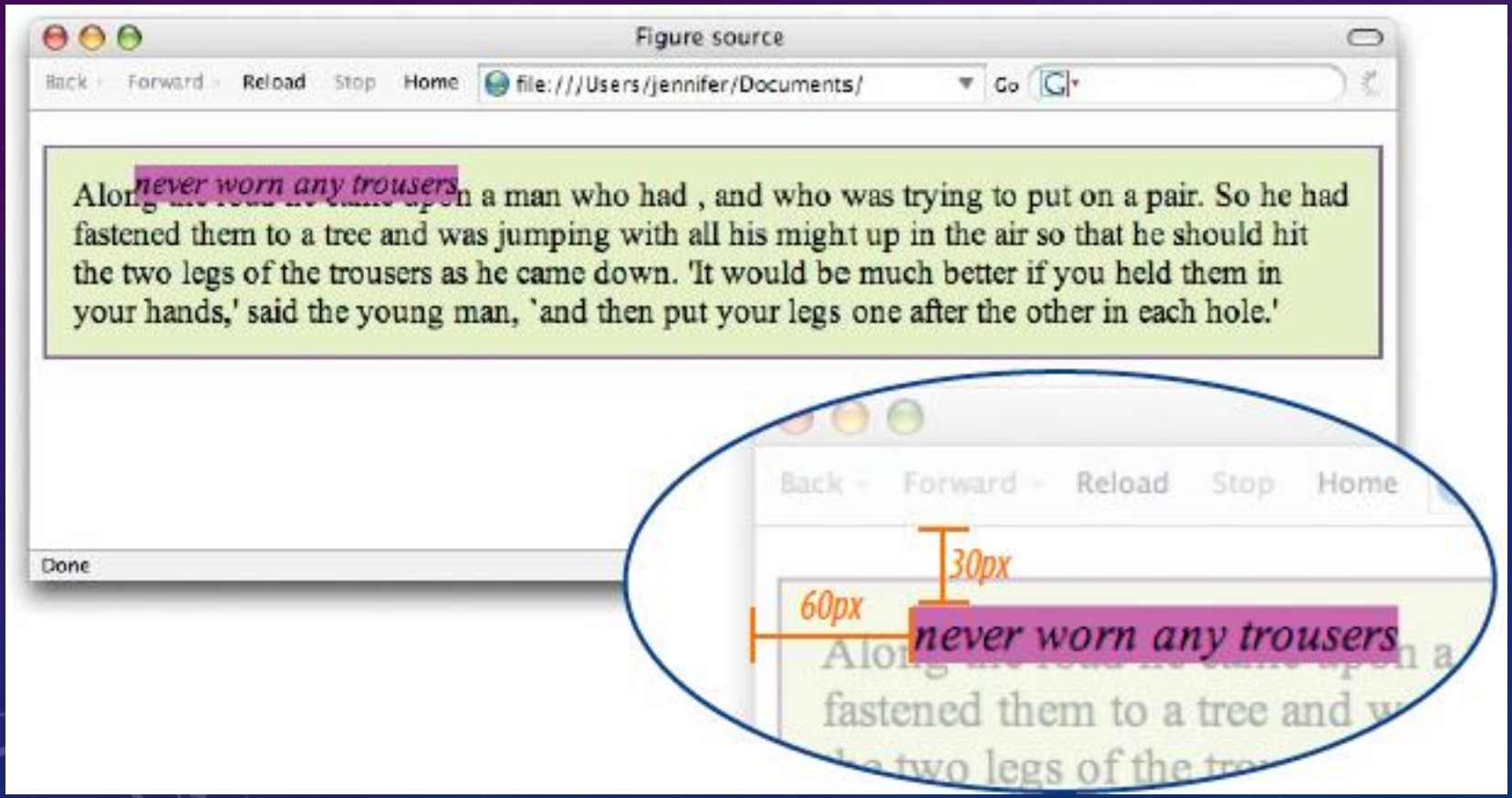
```
em {
  position: relative;
  top: 30px;
  left: 60px;
  background-color: fuchsia;
}
```

Along the road he came upon a man who had , and who was trying to put on a pair. So he had fastened them to a tree and wa ight up in the air so that he should hit the two legs of the trousers as he came down. 'It would be much better if you held them in your hands,' said the young man, `and then put your legs one after the other in each hole.'

never worn any trousers



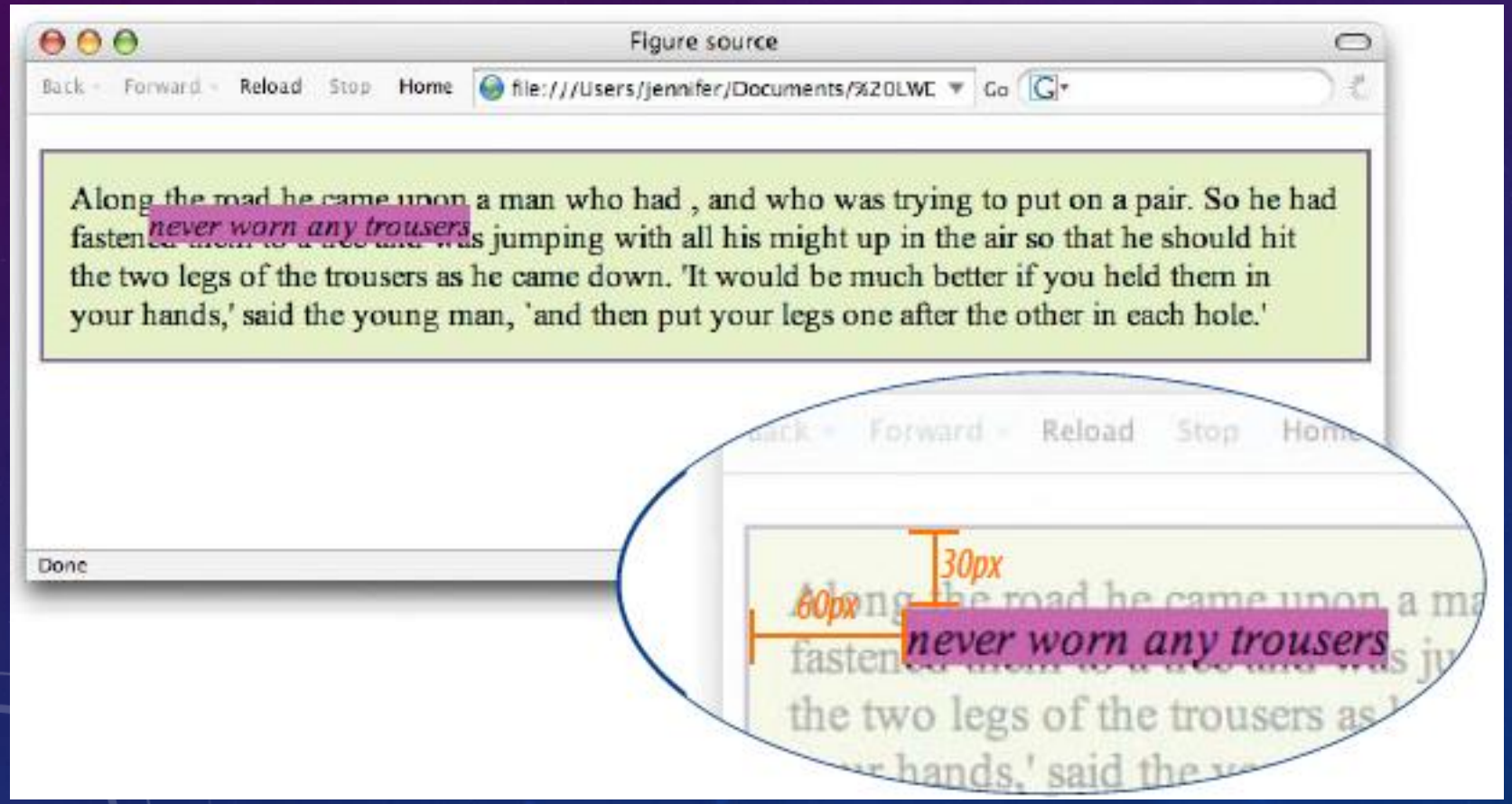
POSICIONAMENTO ABSOLUTO




```
em {
  position: absolute;
  top: 30px;
  left: 60px;
  background-color: fuchsia;
}
```

CONTAINING BLOCKS

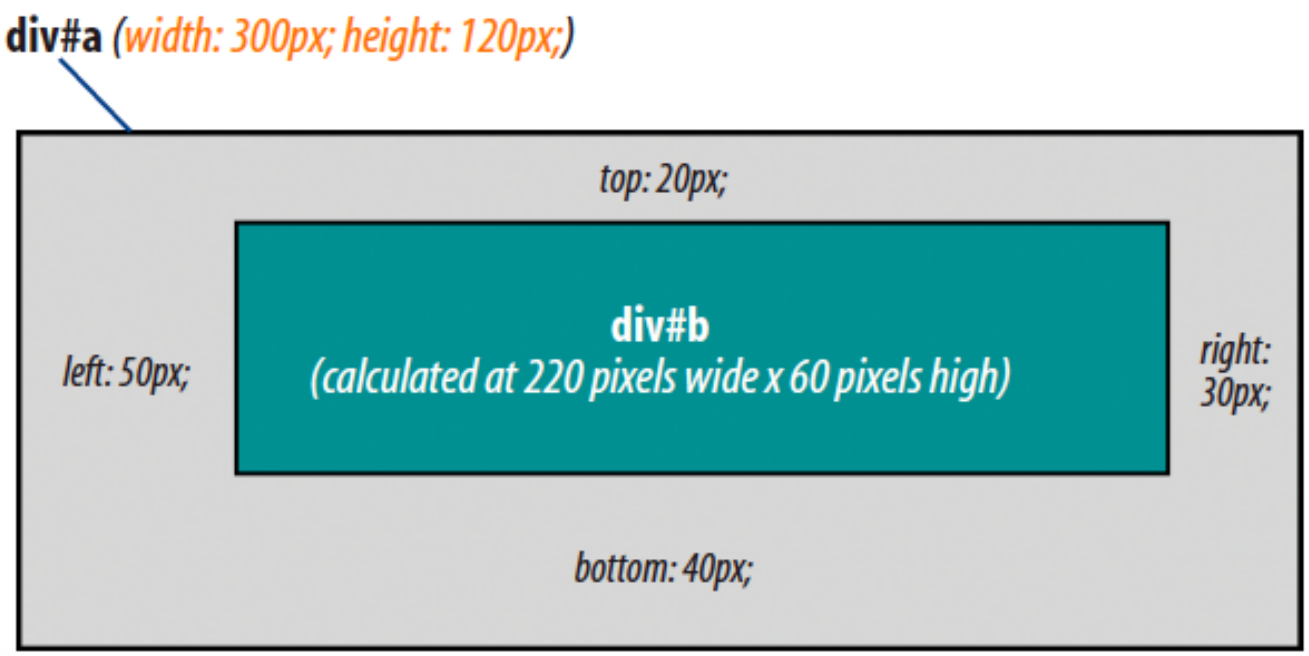
- Se o elemento não está contido em nenhum outro elemento, a posição absoluta será em relação ao bloco `html` ou `body`.
- Se o elemento tem um antecessor com valor de position em relative, absolute ou fixed, então será posicionado em relação ao antecessor



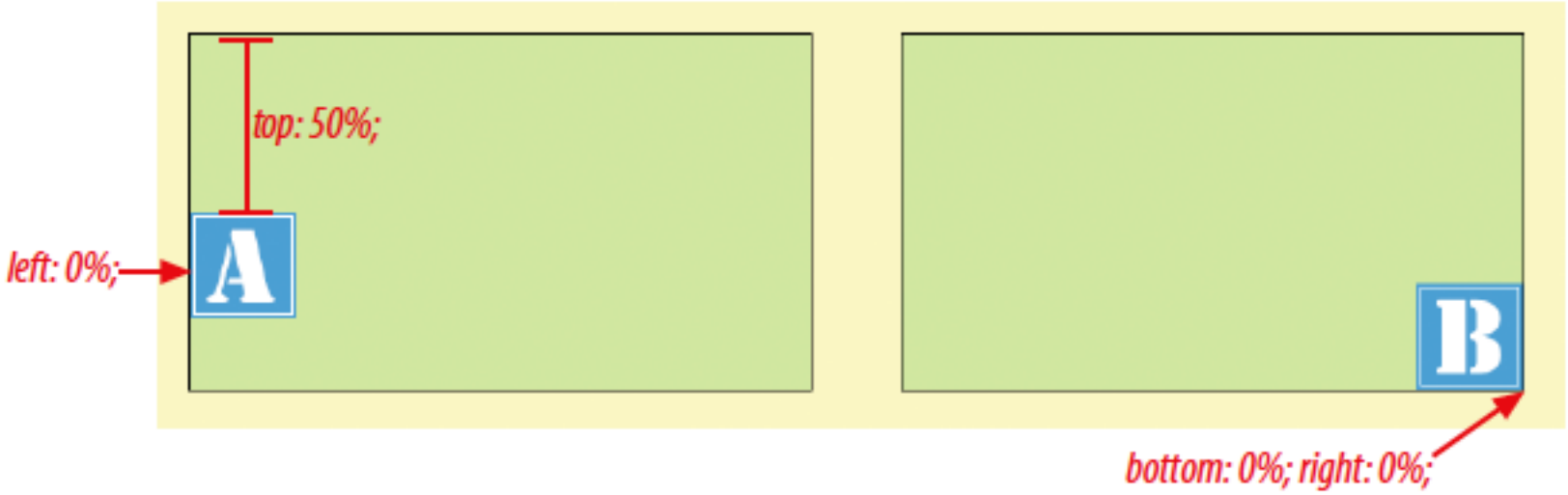

```
p {
  position: relative;
  padding: 15px;
  background-color: #DBFDBA;
  border: 2px solid #6C4788;
}
```

```
div#a {
  position: relative;   /* creates the containing block */
  height: 120px;
  width: 300px;
  border: 1px solid;
  background-color: #CCC;
}

div#b {
  position: absolute;
  top: 20px;
  right: 30px;
  bottom: 40px;
  left: 50px;
  border: 1px solid;
  background-color: teal;
}
```



```
img#A {
  position: absolute;
  top: 50%;
  left: 0%;   /* the % symbol could be omitted for a 0 value */
}
img#B {
  position: absolute;
  bottom: 0%;   /* the % symbol could be omitted for a 0 value */
  right: 0%;   /* the % symbol could be omitted for a 0 value */
}
```



The markup

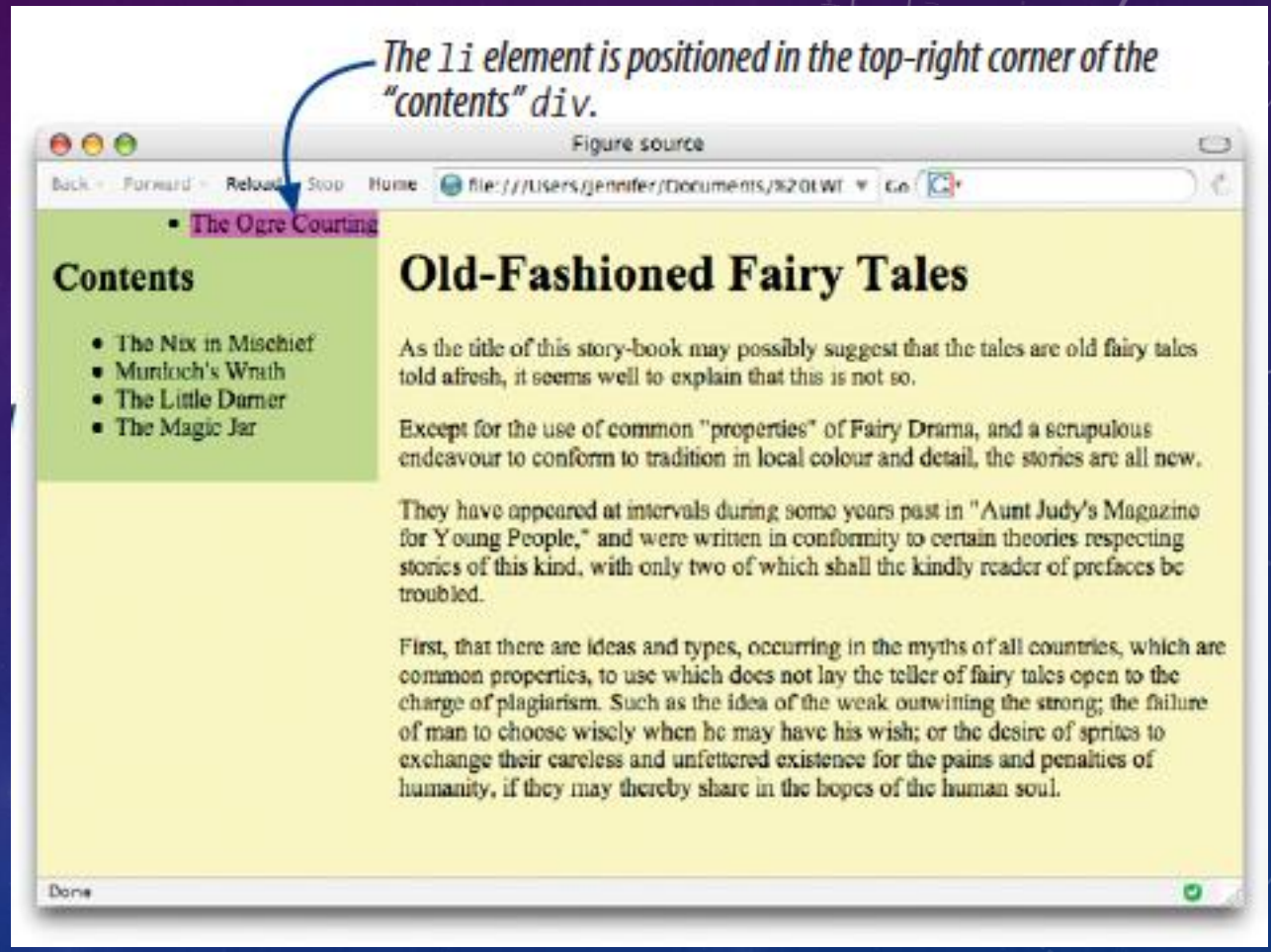
```
<div id="preface">
…
</div>

<div id="content">
<h2>Contents</h2>
<ul>
    <li>The Nix in Mischief</li>
    <li id="special">The Ogre Courting</li>
    <li>Murdoch's Wrath</li>
    <li>The Little Darner</li>
    <li>The Magic Jar</li>
</ul>
</div>
```

The style sheet

```
div#content {
  width: 200px;
  position: absolute;
  top: 0;    /* positioned in the top-left corner */
  left: 0;
  background-color: #AFD479;
  padding: 10px;
}

li#special {
  position: absolute;
  top: 0;     /* positioned in the top-right corner */
  right: 0;
  background-color: fuchsia;
}
```



BARRA DE NAVEGAÇÃO

- Exemplo de como converter o menu de navegação vertical ao lado para um menu horizontal?
  a) Desligar *bullets* e zerar *margins* e *padding* (`list-style-type`)
  b) Tornar os elementos da lista flutuantes para que se alinhem horizontalmente (float)
  c) Fazer os elementos da lista serem exibidos como elementos de bloco e adicionar propriedades típicas: **`padding`**, **`margin`** e **`background-color`**
  d) Não permitir que elementos posteriores sejam flutuantes

```
<ul>
  <li><a href="#">Serif</a></li>
  <li><a href="#">Sans-serif</a></li>
  <li><a href="#">Script</a></li>
  <li><a href="#">Display</a></li>
  <li><a href="#">Dingbats</a></li>
</ul>
```

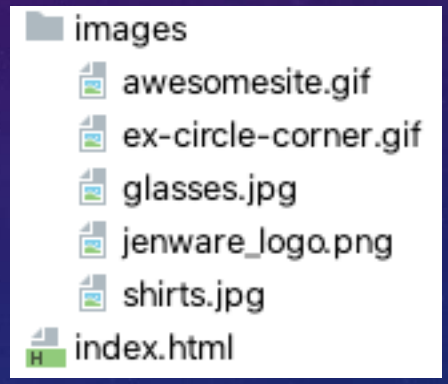
- Serif
- Sans-serif
- Script
- Display
- Dingbats

CSS NAVIGATION BAR

HTTPS://WWW.W3SCHOOLS.COM/CSS/CSS_NAVBAR.ASP

EXERCÍCIO 1

- A partir do site *Jenware* disponibilizado, converter o menu vertical em um menu horizontal.
- São disponibilizados os arquivos mostrados na figura ao lado
- Iniciar analisando o arquivo `index.html` e identificando as principais `div` (nav, content, products, testimonials)
- Qual `div` está relacionada com o menu?



EXERCÍCIO 1

- Observar que os estilos estão definidos na tag <style> do próprio arquivo HTML.
- Quais as regras de estilo que relacionam-se com o menu de navegação? Estes são os estilos que deve ser modificados.
- Como tornar a lista horizontal utilizando a propriedade float?
  - **#nav ul li** {
    ...
    float: **left**;

EXERCÍCIO 1

- O que aconteceu com o menu? Observe que houve uma sobreposição.
- Como corrigir utilizando a propriedade clear?
  - **#products** {
    ...
    clear: **both**;
- Agora o que houve com a cor de fundo do menu? Como corrigir utilizando a propriedade overflow?
  - **#nav** {
    overflow: **hidden**;
    width: 100%;

EXERCÍCIO 1

- Melhorar a apresentação dos links (<a>), aplicando as regras de estilo:
  - **#nav ul li a** {
    display: **block**;
    padding: .5**em**;
    border: 1**px solid #ba89a8**;
    border-radius: .5**em**;
    margin: .25**em**;
    }
- Acrescente cada regra individualmente e veja o resultado.

EXERCÍCIO 2

- Modificar a página anterior para criar um layout de duas colunas utilizando floats.
- Iniciar acrescentando a propriedade width (utilizar um valor percentual) para #products div e permitir flutuação a esquerda do box Testimonials, assim criando uma nova coluna
- O que aconteceu?

EXERCÍCIO 2

- Ajustar as margens da #testimonials div para torná-la totalmente visível.
- Qual a margem que deve ter maior espaçamento? Qual unidade de medida deve ser usada? (px, %, em)
- Finalizar deixando o copyright na parte inferior da página e centralizado

EXERCÍCIO 2

JENWARE

MAKE IT PERSONAL

Special occasions call for special gifts. The Jenware line of housewares and clothing can be personalized for the ones you love.

HOUSE | BABY | MORE | ABOUT

NEW PRODUCTS

BARWARE

The perfect wedding gift. Our highest quality glassware is sandblasted by hand with the character of your choice. Choose from 30 characters and 24 typefaces. Custom designs are also available for an additional design charge. Allow 2 to 4 weeks for delivery.

More about custom barware...

BABYWARE

Tired of sickly-sweet? These onesies with oversized letters in bold, bright patterns are a welcome change from the usual pastel fare. Monogrammed pants and baby shoes are also available. Tell us the initial and mix and match from 6 fun fabric patterns and 8 edging colors. Allow 2 to 4 weeks for delivery. Sizes: 3mos, 6mos, and 12mos.

More about our onesies...

TESTIMONIALS

"The Jenware onesies were the hit of the baby shower. The custom letter "a" and handmade quality made this gift really stand out among the cookie-cutter clothes from the department store."

"Thanks for the cool Jenware barware. I couldn't wait until I found "Mr. Right," so I just bought a set for myself! My friends always want to know where I got them so I send them to your site."

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REFERÊNCIAS

- https://www.w3schools.com/css/css_navbar.asp